

UNCLASSIFIED

EXHIBIT R-2, FY 2000 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604618N

PROGRAM ELEMENT TITLE: Joint Direct Attack Munition (JDAM)

(U) COST: (Dollars in Thousands)

<u>Project Number &amp; Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
E2137 JDAM										
<b>TOTAL</b>	<b>15,389</b>	<b>11,160</b>	<b>11,782</b>	<b>26,455</b>	<b>39,231</b>	<b>34,462</b>	<b>38,309</b>	<b>25,457</b>	<b>0</b>	<b>311,196</b>
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	114

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: JDAM is a joint acquisition program combining Department of Navy and Air Force requirements to upgrade existing General Purpose Bomb capabilities in adverse weather and at medium to high altitude releases. The upgrade is accomplished by the addition of a guidance tail kit to existing General Purpose Bombs. The Air Force is the executive service. The Navy's participation in JDAM involves joint development of JDAM components and support of Navy-Marine Corps unique requirements such as aircraft integration on the F/A-18. JDAM will provide an accurate (defined as not more than 13 meters) adverse weather capability. The program will incorporate commonality with the Joint Standoff Weapon where feasible. The JDAM Product Improvement Program (PIP) will field improvements to the JDAM system with initial emphasis on attaining precision (3 meters or less) accuracy through non-seeker and seeker initiatives. 114 Guided Test Vehicles (GTVs) were procured in FY96 during the Engineering & Management Development (E&MD) contract.

R-1 Item No. II9  
UNCLASSIFIED

**UNCLASSIFIED**  
**EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET**

**DATE: February 1999**

**BUDGET ACTIVITY: 5**

**PROGRAM ELEMENT: 0604618N**

**PROJECT NUMBER: E2137**

**PROGRAM ELEMENT TITLE: Joint Direct Attack Munition (JDAM)**

**PROJECT TITLE: JDAM**

**(U) COST: (Dollars in Thousands)**

<u>Project Number &amp; Title</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
<b>E2137 JDAM</b>										
<b>TOTAL</b>	<b>15,389</b>	<b>11,160</b>	<b>11,782</b>	<b>26,455</b>	<b>39,231</b>	<b>34,462</b>	<b>38,309</b>	<b>25,457</b>	<b>0</b>	<b>311,196</b>
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	114

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: JDAM is a joint acquisition program combining Department of Navy and Air Force requirements to upgrade existing General Purpose Bomb capabilities in adverse weather and at medium to high altitude releases. The upgrade is accomplished by the addition of a guidance tail kit to existing General Purpose Bombs. The Air Force is the executive service. The Navy's participation in JDAM involves joint development of JDAM components and support of Navy-Marine Corps unique requirements such as aircraft integration on the F/A-18. JDAM will provide an accurate (defined as not more than 13 meters) adverse weather capability. The program will incorporate commonality with the Joint Standoff Weapon where feasible. The JDAM Product Improvement Program (PIP) will field improvements to the JDAM system with initial emphasis on attaining precision (3 meters or less) accuracy through non-seeker and seeker initiatives. 114 Guided Test Vehicles (GTVs) were procured in FY96 during the Engineering & Management Development (E&MD) contract.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1998 ACCOMPLISHMENTS:

- (U) (\$ 5,638) Continued Developmental Testing (DT), and initiated Operational Testing (OT-IIB) (OPEVAL).
- (U) (\$ 1,431) Continued Operation Flight Program (OFP) software activities supporting flight testing and aircraft integration, and continued JDAM Mission Planning Module (MPM) development for TAMPS.
- (U) (\$ 1,886) Continued to incrementally fund JDAM Test Assets (GTVs) initially procured in FY96 and FY97.

**R-1 Item No. II9**  
**UNCLASSIFIED**

**UNCLASSIFIED**  
**EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET**

**DATE: February 1999**

**BUDGET ACTIVITY: 5**

**PROGRAM ELEMENT: 0604618N**

**PROJECT NUMBER: E2137**

**PROGRAM ELEMENT TITLE: Joint Direct Attack Munition (JDAM)**

**PROJECT TITLE: JDAM**

- (U) (\$ 4,894) Performed systems engineering, ILS and program support for the JDAM E&MD Phase II, LRIP II decision, and performed systems engineering support for the Concept Exploration (CE) phase of the JDAM Product Improvement Program (PIP) development program.
- (U) (\$ 1,169) Continued support of the JDAM aircraft integration effort for the 1000# variant.
- (U) (\$ 371) Continued systems engineering, ILS, program support, and testing for Joint Programmable Fuze (JPF) E&MD program.

**2. FY 1999 PLAN:**

- (U) (\$ 2,634) Complete OT-IIB (OPEVAL) testing, and OT-IIB (Verification of the Correction of the Deficiency (VCD)).
- (U) (\$ 385) Continue OFP software activities supporting flight testing and aircraft integration, and continue JDAM MPM support for TAMPS.
- (U) (\$ 4,574) Perform systems engineering, ILS and program support for the JDAM E&MD Phase II, MS-III decision, fleet deployment IOC, and continue to perform systems engineering support for the CE phase of the JDAM PIP development program.
- (U) (\$ 3,450) Continue to support the JDAM aircraft integration effort for the 1000# variant.
- (U) (\$ 117) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

**3. FY 2000 PLAN:**

- (U) (\$ 566) Continue JDAM MPM support for TAMPS.
- (U) (\$ 8,433) Perform systems engineering, ILS and program support for the 1000# LRIP decision, and continue to perform systems engineering support for the JDAM PIP development program.
- (U) (\$ 2,783) Continue to support the JDAM aircraft integration effort for the 1000# variant.

**R-1 Item No. II9**  
**UNCLASSIFIED**

**UNCLASSIFIED**  
**EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET**

**DATE: February 1999**

**BUDGET ACTIVITY: 5**

**PROGRAM ELEMENT: 0604618N**

**PROJECT NUMBER: E2137**

**PROGRAM ELEMENT TITLE: Joint Direct Attack Munition (JDAM)**

**PROJECT TITLE: JDAM**

**(U) B. PROGRAM CHANGE SUMMARY**

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>
(U) FY 1999 President's Budget:	12,003	11,738	11,699
(U) Appropriated Value:	12,003	11,738	
(U) Adjustments from Pres Budget:	+3,386	-578	+83
(U) FY 2000 President's Budget Submit:	15,389	11,160	11,782

**CHANGE SUMMARY EXPLANATION:**

(U) Funding: The FY98 increase of \$3,386 thousand reflects a decrease of -\$500 thousand for a Below Threshold Reprogramming (BTR), a -\$414 thousand decrease for the Small Business Innovative Research (SBIR) transfer, a BTR increase of \$1,900 thousand to fund the Boeing EM&D contract, and a BTR increase of \$2,400 thousand to fund the OPEVAL flight testing. The FY98 BTR of \$1,900 thousand and \$2,400 thousand represent an exchange of FY97 dollars for FY98 to fund a portion of the F/A-18 shortfall. The FY99 decrease of -\$578 thousand reflects a reduction of -\$535 thousand for contract advisory and assistance services, and a decrease of -\$43 thousand for revised economic assumptions. The FY00 increase of \$83 thousand reflects an addition of \$300 thousand to fully fund the JDAM PIP program and a decrease of -\$217 thousand for various minor program adjustments.

(U) Schedule: The rephasing of test requirements has resulted in the following changes: DT-IIIB to 1Q98/3Q98, OT-IIB to 4Q98/1Q99; OT-III 2Q98/3Q98 to DT/OT 3Q98/3Q98; DT Assist 1Q98/2Q98, DT-Fin Lock 1Q99/1Q99, and OT-IIB (VCD) 2Q99/2Q99 were added.

(U) Technical: Not Applicable.

**(U) C. OTHER PROGRAM FUNDING SUMMARY**

<u>Appn</u>	<u>FY 1998 Budget</u>	<u>FY 1999 Budget</u>	<u>FY 2000 Estimate</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>
PAN,MC/B.A-1 Ammunition-JDAM	25,050	37,815	35,563	29,628	30,177	64,990	66,354	67,693	346,701
<u>Related RDT&amp;E</u>									
(U) P.E. 0604618F Air Force JDAM	21,054	11,954	1,385	1,169	1,578				

**R-1 Item No. II9**  
**UNCLASSIFIED**

UNCLASSIFIED

EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 1999

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604618N

PROJECT NUMBER: E2137

PROGRAM ELEMENT TITLE: Joint Direct Attack Munition (JDAM)

PROJECT TITLE: JDAM

(U) C. ACQUISITION STRATEGY: The Joint Direct Attack (JDAM) program acquisition strategy is derived from the 1994 Federal Acquisition Streamlining Act (FASA). The focus of the program is to reduce acquisition management costs by buying bomb modification kits as if they were commercial items, including obtaining waivers to regulations that affect the efficiency of the contracting process. The JDAM contracting officer has authority to approve individual deviations from any Federal Acquisition Regulation (FAR) and Defense Acquisition Regulation Supplement (DFARS) provision not required by Statute of Executive Order for the JDAM EMD contract. The contract management philosophy includes partnering with the contractor, long term relationships with vendors, negotiations based on prices instead of costs, credit for past performance, and allowing the contractor to determine how to produce the product with the government providing only what the product must do. Cost is an independent variable. JDAM kits have a lifetime (20 year) warranty, significantly reducing Operating and Support costs.

(U) D. SCHEDULE PROFILE

	<u>FY 998</u>	<u>FY1999</u>	<u>FY2000</u>
(U) Program Milestones	3Q LRIP	2Q MS-III 4Q IOC	
(U) Engineering Milestones			
(U) T&E Milestones	DT-Assist 1Q98/2Q98 DT-IIIB 1Q98/3Q98 DT/OT 3Q98 OT-IIIB 4Q98/1Q99	DT-Fin Lock 1Q99 OT-IIIB (VCD) 2Q99	
(U) Contract Milestones			

R-1 Item No. II9  
UNCLASSIFIED

# UNCLASSIFIED

## EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: Feb 1999

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604618N

PROJECT NUMBER:

E2137

PROJECT TITLE:

JDAM

<u>Cost Categories:</u>	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<b><u>Product Development</u></b>										
CMBRE Development	MIPR	ASC/LDA	1,582						1,582	
OFP Development	WX	WSSA/CL	17,130	151	11/98	31	11/99	4,642	21,954	
TAMPS Development	C/CPAF	Raytheon	5,404	45	11/98	267	11/99	13,225	18,941	18,941
Aircraft Integration	SS/CPAF	Boeing	6,243	500	12/98	2,783	6/00	2,823	12,349	12,349
PIP Development	C/CPAF	Boeing	1,015	942	6/99	3,740	6/00	85,791	91,488	91,488
In-house Support	WX	NAWC/CL	40,178	2,627	10/98	4,055	10/99	23,739	70,599	
Misc. (efforts under \$1M – Aggregate)	Various	Various	3,469	145	10/98				3,614	
<b>Subtotal Project Development</b>			<b>75,021</b>	<b>4,410</b>		<b>10,876</b>		<b>130,220</b>	<b>220,527</b>	

Remarks

### Support Costs

Travel	Project Directive	JDAM	1,140	89	10/98	110	10/99	710	2,049	
Engineering Services	Various	Various	7,729	1,040	10/98	660	10/99	6,295	15,724	
<b>Subtotal Support</b>			<b>8,869</b>	<b>1,129</b>		<b>770</b>		<b>7,005</b>	<b>17,773</b>	

Remarks

R-1 Item No. II9  
UNCLASSIFIED

# UNCLASSIFIED

## EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

DATE: Feb 1999

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604618N

PROJECT NUMBER:

E2137

PROJECT TITLE:

JDAM

Cost Categories:	Contract Method & Type	Performing Activity & Location	Total Prior Yrs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	Cost to Complete	Total Cost	Target Value of Contract
<u>Test and Evaluation</u>										
Development Test	WX	NAWC/CL	12,743	1,683	10/98			6,939	21,365	
Operational Test	PD	OPTEVFOR	4,756	951	10/98			1,896	7,603	
Test Assets	MIPR/ C/CPAF	BOEING	12,985	2,760	7/99			16,281	32,026	32,026
Award Fee	MIPR/ C/CPAF	BOEING	904						904	904
Misc. (efforts under \$1M – Aggregate)	Various	Various	3,857						3,857	
<b>Subtotal Test &amp; Evaluation</b>			<b>35,245</b>	<b>5,394</b>		<b>0</b>		<b>25,116</b>	<b>65,755</b>	

Remarks

### Management Services

Misc. (efforts under \$1M – Aggregate)	Various	Various	5,204	227	10/98	136	10/99	1,574	7,141	
<b>Subtotal Management</b>			<b>5,204</b>	<b>227</b>		<b>136</b>		<b>1,574</b>	<b>7,141</b>	

Remarks

<b>Total Cost</b>			<b>124,339</b>	<b>11,160</b>		<b>11,782</b>		<b>163,915</b>	<b>311,196</b>	
-------------------	--	--	----------------	---------------	--	---------------	--	----------------	----------------	--

R-1 Item No. II9  
UNCLASSIFIED